Applying Values

STRUCT GEOTECH RESEARCH LABORATORIES (P) LTD

JAS-ANZ
BSCIC
ISO 9001 REGISTERED
BN1868/1500:0210

No. 588, 2nd Main, 6th Block
Hosakerehalli Cross
Banashankari III Stage, II Phase
Bangalore - 560 085, India

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SGRL//BBMP/RRNZ/2014-15/303 31.05.2014

To
The Assistant Executive Engineer
Rajarajeshwarinagara Projects
Bruhath Bangalore Mahanagara Palike
Bangalore

Sir,

Sub: Quality Control Tests on materials for the work of Improvements to park & other works at JP park, ward no.17 RRN Zone.

Ref: 1. W.O. No. EE/QC/Div-2/PR/324/11-12, dt. 18.03.2013
2. Letter no. NO/AEE(P)/RRNZ/BBMP/PR/2013-14, dt: 27.02.2014

With reference to the above cited subject, herewith we are submitting the reports pertaining 40mm Aggregate, 20mm Aggregate, Sand, Cement & Kerb stone test reports. Kindly acknowledge the same upon receipt of Test reports.

This is for your kind information.

Thanking you

Yours faithfully

For Struct Geotech Research Laboratories Private Limited

Authorized Signature

AE. 17

Assistant Executive Engineer
R.R. Nagar Project Sub-Division-02
Bruhat Bengaluru Mahanagara Palike

Report No.: SGRL / CM /909/ 14 - 15

20.05.2014

TEST REPORT

Client*	:	The Assistant Executive Engineer Rajarajeshwarinagara Projects Bruhath Bengaluru Mahanagara Palike Bangalore
Client Reference*	:	AEE(P)/RRNZ/BBMP/PR/2013-14, dt:27.02.2014
Job Reference *	:	EE/QC/Div-2/PR/324/11-12, dated 18.03.2013
CSR No.	:	CM 297, dt: 20.05.2014
Name of the work*	:	Improvements to park & other works at J.P. park, ward no.17 RRN Zone
Contractor*	:	M/s. K R I D L
Source of Sample	:	Sample supplied of TPIA
Sample Id*	:	J.P. park, ward no.17 RRN Zone – PCC 1:4:8 for Path way work
Date of receipt	:	20.05.2014
Date of testing	:	20.05.2014
Type of sample	:	Coarse Aggregate - 40mm and down size
Name of test	:	Sieve Analysis

IS Sieve Designation	Cumulative Percent Passing		Test Method
	Test Result	Requirement as per Table – 1000-1 of MoRT&H	
63.00 mm	100	100	IS: 2386 (Part 1) - 1963
40.00 mm	57.96	95 -100	
20.00 mm	30.37	30 - 70	
10.00 mm	19.87	10 -35	
4.75 mm	19.19	0 - 5	

For Struct Geotech Research Laboratories Pvt. Ltd.,

Authorized Signature

B. Venkata Subramanyam
Executive Director

Note: (i) The Results relate only to the items tested (ii) This test report should not be reproduced except in full, without written approval of this laboratory (iii) Any corrections invalidates this report (iv) Any Query regarding the report must be reported immediately

***Information as furnished by TPIA**

28.5.14

Assistant Executive Engineer
R.R. Nagar Project Sub-Division-02
Bruhat Bengaluru Mahanagara Palike

No.: 588, 2nd Main, 6th Block, Hosekerehalli Cross, Banashankari III Stage, II Phase, Bangalore- 560 085

Report No.: SGRL / CM /910/ 14 - 15 20.05.2014

TEST REPORT

Client*	:	The Assistant Executive Engineer Rajarajeshwarinagara Projects Bruhath Bengaluru Mahanagara Palike Bangalore
Client Reference*	:	AEE(P)/RRNZ/BBMP/PR/2013-14, dt:27.02.2014
Job Reference *	:	EE/QC/Div-2/PR/324/11-12, dated 18.03.2013
CSR No	:	CM 297, dt: 20.05.2014
Name of the work*	:	Improvements to park & other works at J.P. park, ward no.17 RRN Zone
Contractor*	:	M/s. K R I D L
Source of Sample	:	Sample supplied of TPIA
Sample Id*	:	J.P. park, ward no.17 RRN Zone – M15 for Path way work
Date of receipt	:	20.05.2014
Date of testing	:	20.05.2014
Type of sample	:	Coarse Aggregate - 20mm and down size
Name of test	:	Sieve Analysis

IS Sieve Designation	Cumulative Percent Passing		Test Method
	Test Result	Requirement as per Table – 1000-1 of MoRT&H	
40.00 mm	100	100	IS: 2386 (Part 1) - 1963
20.00 mm	94.60	95-100	
10.00 mm	25.03	25-55	
4.75 mm	1.56	0-10	

For Struct Geotech Research Laboratories Pvt. Ltd.,

Authorized Signature

B. Venkata Subramanyam
Executive Director

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***Information as furnished by TPIA**

Assistant Executive Engineer
R.R. Nagar Project Sub-Division-02
Bruhat Bengaluru Mahanagara Palike

No : 588, 2nd Main, 6th Block, Hosakerehalli Cross, Banashankari III Stage, II Phase, Bangalore- 560 085

Report No.: SGRL / CM /911/ 14 - 15 20.05.2014

TEST REPORT

Client* : The Assistant Executive Engineer
Rajarajeshwarinagara Projects
Bruhath Bengaluru Mahanagara Palike
Bangalore

Client Reference* : AEE(P)/RRNZ/BBMP/PR/2013-14, dt:27.02.2014
Job Reference* : EE/QC/Div-2/PR/324/11-12,dated 18.03.2013
CSR No. : CM 297, dt: 20.05.2014
Name of the Project* : Improvements to park & other works at J.P. park, ward no.17 RRN Zone
Contractor* : M/s. K R I D L
Source of Sample : Sample supplied of TPIA
Sample ID* : J.P. park, ward no.17 RRN Zone – PCC 1:4:8 & M15 for Path way work
Type of Sample : Sand
Name of Test : Sieve Analysis
Date of Receipt : 20.05.2014
Date of Testing : 20.05.2014
Test Method : IS : 2386 (Part 1) 1963

Sl. No.	Sieve Size (mm)	Weight Retained	% Weight Retained	Cumulative % of Weight Retained	% of Weight Passing	Specifications as Per MoRT&H
1	10	0.00	0.00	0.00	100.00	100.00
2	4.75	13.48	2.70	2.70	97.30	90-100
3	2.36	30.26	6.05	8.75	91.25	75-100
4	1.18	130.56	26.11	34.86	65.14	55-90
5	0.60	148.45	29.69	64.55	35.45	35-59
6	0.30	126.66	25.33	89.88	10.12	8-30
7	0.15	47.65	9.53	99.41	0.59	0-10

The Sand tested conforms to Zone II as per MoRT& H (Fourth Revision)

For Struct Geotech Research Laboratories Private Limited

Authorised Signature
B. Venkata Subramanyam
Executive Director

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***Information as furnished by the TPIA**

Assistant Executive Engineer
R.R. Nagar Project Sub-Division-02
Bruhat Bengaluru Mahanagara Palike

No.: 588, 2nd Main, 6th Block, Hosekerehalli Cross, Banashankari III Stage, II Phase, Bangalore- 560 085

Report No.: SGRL / CM /912/ 14-15 31.05.2014

TEST REPORT

Client* : The Assistant Executive Engineer
Rajarajeshwarinagara Projects
Bruhath Bengaluru Mahanagara Palike
Bangalore

Client Reference* : AEE(P)/RRNZ/BBMP/PR/2013-14, dt:27.02.2014

Job Reference * : EE/QC/Div-2/PR/324/11-12, dated 18.03.2013

CSR No : CM 297, dt: 20.05.2014

Name of the work* : Improvements to park & other works at J.P. park, ward no.17 RRN Zone

Contractor* : M/s. K R I D L

Source of Sample : Sample supplied of TPIA

Sample Id* : J.P. park, ward no.17 RRN Zone – PCC 1:4:8 & M15 for Path way work

Date of receipt : 20.05.2014

Date of testing : 20.05.2014 to 31.05.2014

Type of Sample : Cement

Type of Cement*: OPC **Grade of Cement*:** 53 **Brand*:** Birla Super

Sl. No.	Description	Test Result	Requirements as per IS: 12269-1987	Test Method
1.	Setting Time			
	a) Initial Setting Time	190 min	Min.30 min	IS 4031 (Part V)
	b) Final Setting Time	400 min	Max.600 min	
2.	Standard Consistency	30.0 %	-	IS: 4031 (Part IV)
3.	Compressive Strength (i) 3 days (72 ± 1h) (average of three results)	28.0 N/mm^2	Not less than 27 N/mm^2	IS: 4031 (Part VI)

For Struct Geotech Research Laboratories Pvt. Ltd.,

Authorized Signature
B. Venkata Subramanyam
Executive Director

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***Information as furnished by TPIA**

Assistant Executive Engineer
R.R. Nagar Project Sub-Division-02
Bruhat Bengaluru Mahanagara Palike

No.: 588, 2nd Main, 6th Block, Hosekerehalli Cross, Banashankari III Stage, II Phase, Bangalore- 560 085

Report No.: SGRL / CM / 913/ 14-15 31.05.2014

TEST REPORT

Client* : The Assistant Executive Engineer
Rajarajeshwarinagara Projects
Bruhath Bengaluru Mahanagara Palike
Bangalore

Client Reference* : AEE(P)/RRNZ/BBMP/PR/2013-14, dt:27.02.2014

Job Reference* EE/QC/Div-2/PR/324/11-12, dt: 18.03.2013

CSR No. : CM 297, dt: 20.05.2014

Name of the Work* : Improvements to park & other works at J.P. park, ward no.17 RRN Zone

Contractor* : M/s. K R I D L

Source of sample : Sample supplied of TPIA

Sample ID* : 2nd Main of Mutyala Nagara ward No.17 - for Path way work

Grade of Concrete* : CC 1:2:4

Date of Receipt : 20.05.2014

Date of Testing : 31.05.2014

Name Test : Concrete Core Compressive Strength of precast solid concrete kerb stone

Technical : IS : 516 - 1959, SP - 24 : 1983

Sl. No.	Identification*	Core Details				H / D ratio	Correction factor for H/D	Failure Load (kN)	Core Strength (N/mm^2)	Corrected Core Strength for Diameter (N/mm^2)	Corrected Cylinder Compressive Strength (N/mm^2)	Equivalent Cube Compressive Strength (N/mm^2)
		Dia, D (mm)	Height, H (mm)	Weight (kg)	Density (kg/m^3)							
1	CM 297-e_1	74.0	139.28	1.42	2371.7	1.88	0.99	62.0	14.42	15.58	15.38	19.22
2	CM 297-e_2	74.0	139.10	1.47	2458.4	1.88	0.99	64.0	14.89	16.08	15.87	19.84
3	CM 297-e_3	74.0	139.12	1.43	2391.2	1.88	0.99	63.0	14.66	15.83	15.62	19.53

Correction factor : from Fig. 1 of IS: 516 - 1959
Core Strength : Failure Load / Cross sectional area of Core
Corrected Core Strength for Diameter : 1.08 x Core Strength
Corrected Cylinder Compressive Strength : Corrected Core Strength x Correction factor
Equivalent Cube Compressive Strength : 1.25 x Corrected Cylinder Compressive Strength

For Struct Geotech Research Laboratories Private Limited

Authorized Signature
B. Venkata Subramanyam
Executive Director

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* Information as furnished by TPIA

**** end of the test report ****

Assistant Executive Engineer
R.R. Nagar Project Sub-Division-02
Bruhat Bengaluru Mahanagara Palike

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.17/KRIDL/AGG/2014-15 - 22.05.2014

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** (Projects) R.R. Nagar Zone, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements to Park and other works at J.P. Park Ward No.17, R.R. Nagar Zone, BBMP, Bangalore.

Reference : EE(P)/RRND/W.No./115/2013-14 Dated: 24.02.2014

Date of Testing : 22.05.2014

Material : 40mm Aggregates

Total Wt. of Aggregates in gms 26000

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	1020	3.92	3.92	96.08	95-100
20	15855	60.98	64.90	35.10	30-70
10	5930	22.81	87.71	12.29	10-35
4.75	2845	10.94	98.65	1.35	0-5

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory
3. Any Query regarding the report must be reported within 15 days from the date of testing

Civil-Tech Consultants & Engineers Bangalore

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

AE-17

Assistant Executive Engineer
R.R. Nagar Project Division-02
Bruhat Bengaluru Mahanagara Palike